The NR Resource:

A Handbook for Students Majoring in Natural Resources at Ball State University

An Honors Thesis (HONRS 499)

by

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advisor's signature

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Abstract

This design for a student handbook was created to show the Natural Resources Department at Ball State how a simple public relations effort could improve communication between the department's administration/faculty and its students. (Financial restraints prevent the actual reproduction of the handbook, but these pre-production photo-ready pages show exactly how the 6" X 9" pages would look.) It was designed to be a companion to the *Undergraduate Catalog* throughout the student's college years. The basic purpose of such a handbook would be to provide students early on with information regarding academics, extra-curricular activities, and educational resources available to them. The underlying motive, however, would be to help the students feel that the department is there to help them, thus improving morale and building a sense of community within the department that has been lacking in the past. It is the capstone project in a bachelor's degree program with a major in Natural Resources (Public Information and Education) and a minor in Public Relations.

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The Need

The Department of Natural Resources has a communication problem--or rather, a lack of communication--between the administration/faculty and the students. Currently, the only efforts to inform students of activities and concerns within the department are 8.5" X 11" memos posted on a few tiny bulletin boards in West Quad. Students who are not enrolled in NR courses during a particular semester, or whose NR course are taught in Cooper, Teacher's College, or Burkhardt rather than in West Quad (which is becoming more common due to the growth of the NR department), will most likely miss the opportunity to view these postings. This can lead to problems for the students.

NR course requirements can be confusing, because there are five options within the department. In addition, some courses are only offered one semester every other year. When one of these courses is offered, a sign is posted on the bulletin boards saying that the course will not be offered again for another year and a half. Students who do not see the postings do not find out. They may choose to take another course, thinking that they will be able to take this course next semester or next year. Unfortunately, they will not be able to. This situation makes it difficult for some students to plan their schedules efficiently, and to graduate after the standard four-year period. When these students, as fifth- or sixth-year seniors, enroll in junior-level courses that they missed out on the first time around, third- and fourth-year students may be locked out as the courses fill up. This in turn prevents those students from

finishing on time, and the cycle continues.

In the meantime, the department's enrollment is growing as more and more young people become aware of the importance of environmental management. Because the department has always been relatively small, problems have usually been dealt with on an individual basis. The administration has not had an urgent need for a uniform mode of communication to all NR majors. Now things are changing. More students need to do internships. More students need to get permission slips for required TCOM courses. More students want to participate in field study trips. More students need to take the same courses, so more sections may have to be offered. Courses once taught every other year may have to be taught every year. Students need to know what the department is doing, and what it can do, for them. Right now they seem to feel alienated from their own department rather than like part of a community.

The Solution

As a public relations minor, this communication problem in my own department struck a nerve with me. I kept noticing how fellow NR students felt like the department was not doing anything to help them. I kept thinking, "Boy, could this department use a good PR job!" I remembered back to my first year at Ball State, when I was an Architecture student. The College of Architecture and Planning operated much like a family. The professors are known by their first names, they have community-type activities within their building, and they have special events each semester to foster camaraderie and boost morale throughout the college. I believe the NR Department could be more like that. Its students could feel as if they were part of a community. I do not believe it is the use of first names or the special events that matter. Communication is what's missing.As things are right now, the department could throw a party and no

one would show up.

One easy way for the department to communicate with all NR majors would be to create a student handbook that would be distributed to students when they declare an NR major. Providing students with the information they need before any problem develops would save time and prevent frustration for all involved. Right now, as the department is preparing to undergo massive changes, is an excellent time for the administration to consider developing such a handbook, for the benefit of future students.

That was my original idea for my thesis--to research, write, and design an NR Department Handbook. However, because the departmental changes still needed to be approved by the College of Sciences and Humanities, I could not be allowed access to any of the new information. Rather than abandoning the idea--and the department--I chose to use the currently available information to design a handbook, although it would not actually be adopted because in a year or so it would be out of date. The project will still provide the department with an example of what could be done to communicate with the students. Hopefully, they will be able to look at what I have done and recognize the potential benefits of developing their own handbook, once the departmental changes have become finalized. The creation and yearly updating of such a handbook would be an excellent opportunity for student internship and/or practicum experiences.

The Process

I began by making a list of all of the kinds of information I wished my friends and I had access to when we were freshmen and sophomores. That list included items that would have helped us succeed as NR majors, and other items that would simply have helped us feel more like part of the department. The list had 13 items on it,

including academic advising and course scheduling, career guidance, extra-curricular activities, and computer information. Information about the department, faculty, and facilities was included to help create a "family photo album" effect. Internships, readings, field study, library resources, and other academic opportunities seemed appropriate to discuss, and were included as well.

Next, I went to the department chair, the public information office, and the library to find out as much about the department as possible. I compiled information from faculty members and published materials such as the course catalog. When I had all of the information I needed, I began organizing it into sections. I narrowed it down to what I thought would be important to get the students on their way.

I chose to call the handbook *the NR Resource* because I feel it would be exactly that, a friendly source of aid that could be called upon by NR students whenever needed. I decided upon a 6" X 9" format for the handbook, because I believe it would be a perfect companion to the Ball State course catalog, which is that same size. I would suggest recycled paper products for the pages and the cover, the back of which would have a folder pocket. The handy folder-cover (an idea borrowed from the College of Architecture and Planning) would allow the student's DAPR (Degree Audit Progress Report) to be folded and kept conveniently inside. All of the body text was composed on a Macintosh computer with MacWrite word processing software, and the pages were designed with PageMaker desktop publishing software. Text rotation was used around the upper corners for the front cover and the section headings because I feel that it symbolizes that the department is about to turn a new page in its history. Helvetica was chosen as the text Font because it is easy to read, and Palatino for the cover because it lends a more professional look.

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the NRC resource

Where to look, What you'll find...

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resource (n.)

A source of aid or support which can be drawn upon if needed.

the NR resource

This handbook has been designed to serve as a resource for students majoring in Natural Resources at Ball State University. As such, it is the perfect size to accompany your Ball State Course Catalog throughout your college years.

It has been researched, written and designed by an NR major like yourself. It is NOT a list of directives from some departmental committee--although I did ask for some suggestions from NR faculty along the way. It is chock full of the kind of stuff that I wish I had known about earlier, stuff that would have saved me a lot of headaches (if you take advantage of it, it should save you some!).

Inside, you'll find background information about the department, faculty and facilities--so you'll know what you're getting yourself into! In addition, you'll find lots of helpful hints to make your time at Ball State more productive--and less frustrating! From class scheduling to finding a computer lab to looking for a job, you've got it all.

Where you're at, What you've got...

The Department of Natural Resources has 350 majors, minors, and grad students in the fall of '93. Itoccupies two floors of West Quad, and employs Connie Tyler as the administrative coordinator of its office in room 110. Faculty mailboxes are in room 106, and faculty offices are in the ajdacent L-shaped hallway.

The department uses three standard classrooms on the first floor and three laboratory-classrooms on the ground floor. In addition, six research labs on the ground floor allow students and faculty to study air and water quality, soil science, hazardous waste management, waste incineration, and environmental interpretation. The department employs Dale Scheidler as a technician to operate and care for some of the more expensive analytical equipment.

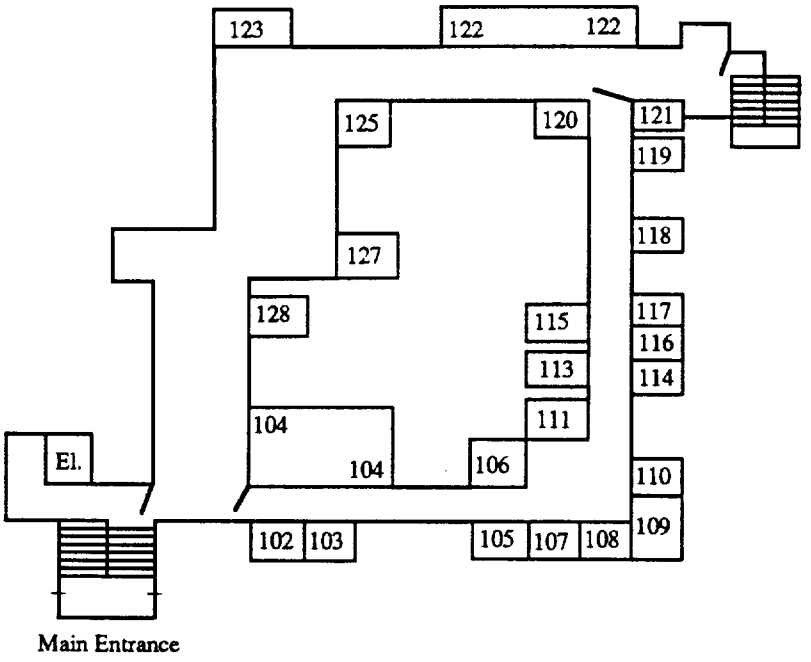
The department has a student reading loungeon the first floor (a great place to hang out between classes!), and a small lab with IBM-compatible computers is in the works.

names & numbers

All on-campus phone numbers have the prefix 285. From any campus phone, you need only dial 5 + the last four digits. All offices ae in West Quad unless otherwise noted by a two-letter building code preceding the room number.

NAME	OFFICE	PHONE
Department Office:		
Connie Tyler	110	5780
Department Chair:		
John Pichtel--solid & toxic waste mgt.	109	5781
Department Faculty:		
Hugh Brown--soils	114	5788
Paul Chandler--economics; management	117	5786
James Eflin--urban planning; geography	116	2327
Thad Godish--air; industrial hygiene	118	5782
Betty Guemple--outdoor recreation	121	5789
Thomas Lowe--energy; minerals; int'l. policy	BB 321	5928
Tim Lyon--environmental education	105	5783
Charles Mortensen--interpretation; history	103	2182
Fred Siewert--water; wastewater treatment	107	5790
Department Technician:		
Dale Scheidler	108	5754

the first floor



IMPORTANT ROOM NUMBERS

110 -- NR Department Office

104 -- Conference Room

106 -- Faculty Mailboxes

113 -- Copier

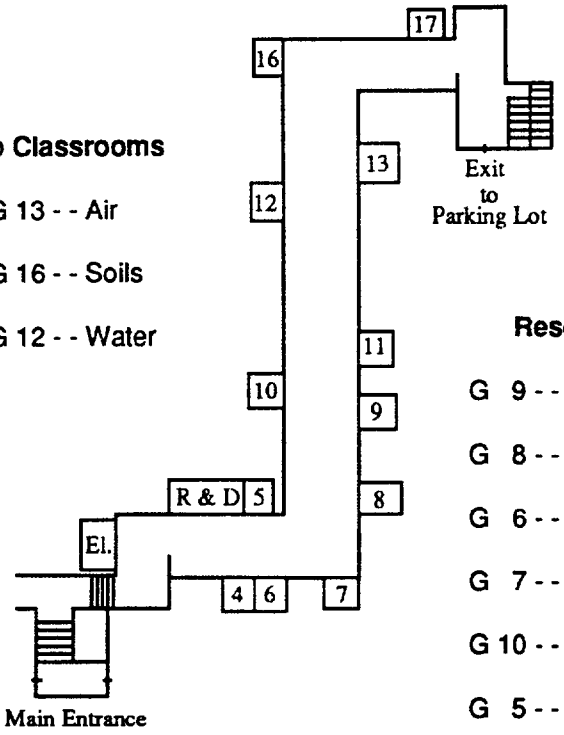
120 -- Computer Lab

128 -- Reading Room

122
123 -- NR Classrooms
125

Faculty office numbers and phone numbers are listed on page 3.

the ground floor



Lab Classrooms

G 13 - - Air

G 16 - - Soils

G 12 - - Water

Research Labs

G 9 - - Air Quality

G 8 - - Hazardous Wastes

G 6 - - Interpretation

G 7 - - Soil Science

G 10 - - Waste Incineration

G 5 - - Water Quality

lab equipment

The department has an assortment of analytical and supporting equipment housed in the various labs. Some equipment is usedby undergraduate students in lab activities, some is used for graudate and faculty research. Department equipment includes, but is not limited to, the following items:

- air sampling equipment
- atomic absorption spectrophotometer
- ion chromatograph
- plant growth chambers
- UV- visible spectrometer

facilities

The University owns several properties which the department uses for outdoor laboratory experiences, and some facilities which are used for research and lab exercises. You will become familiar with at least some of these places during your time as an NR student at Ball State.

One property Ball State is proud to own is Christy Woods on Riverside Avenue. Though located on campus, this area is overlooked by many Ball State students. The property includes two greenhouses, flower gardens, and nature trails through deciduous and coniferous woods that are well-known to forestry students. The greenhouses provide a home to many botany experiments, and one is also home to Ball State's award-winning orchid collection.

The University also owns a 16-acre wildlife preserve about three miles from campus (known in the department as "the 16 acres"), and the Cooper Woodlot behind Dr. Robert Cooper's home. In addition, the NR department owns and operates the Hults Environmental Learning Center in Albany (see facing page).

One facility on campus that is used frequently by NR classes is the weather station, which is across University Avenue from Ball Memorial Hospital and next to the women's track and field area. The weather station is operated by the geography department, but the NR department has keys to it. Air and water quality classes use the equipment in the weather station to measure the amount and acidity of rain and snowfall, as well as to measure the amounts of particulate matter in our air.

One last area on campus that is sometimes used by NR students is the duckpond at the North end of McKinley Avenue. Every year this area is home to one or two families of ducks, as well as assorted sunbathers and swimming dogs during the warm weather months. Large trees on the North bank provide leaves for collecting (which is a serious offense in Christy Woods!).

Hults Environmental Learning Center

The Hults Environmental Learning Center in Albany, Indiana, was acquired by the department in 1987. The property is more commonly referred to as Hults Farm because of its previous land use. The Hults property now includes a two-acre pond/ wetland area, a recently established one-acre tallgrass prairie (which may grow to two or three acres in the future), an outdoor amphitheater, the Big Tree Trail, a small orchard, and coniferous and deciduous forest areas. A parking lot at the entrance off of State Highway 67 accomodates cars, vans, and buses. A walkway leads from the parking lot to the old barn, which the department hopes will eventually be remodeled into a nature center.

The Hults Center's mission is to help people develop a concern for current environmental problems, to provide understandings of ecological systems and how humans affect them, to explain how the cultural development of this geographic area has influenced resource use, and to motivate people to establish and maintain sustainable, quality environments.

The Hults property gets used by many people for a variety of activities. It provides field experiences and research opportunities for students and faculty in agricultural and environmental management, as well as educational services for school and community groups in East-Central Indiana. Landscape architecture students have used the property to study natural and human dynamics in design. Departmental research done at the Hults farm may range in topic from the migration of agricultural chemicals, to the land application of solid wastes, to the processes of terrestrial vegetative succession. Elementary and secondary school teachers use the property for workshops and field trips, and youth and community groups may take tours of the property focusing on the effects of land use management decisions.

Courses to take, Schedules to make...

Courses for your major, courses for your minor, general studies courses, elective courses...By your final semester at Ball State, course scheduling will have become both a science and an art to you. You'll know which prerequisites are necessary, and which are just...helpful. You'll know how to work it so you can party all weekend and not have class until noon on Mondays. Or how to not have ANY classes at all on Fridays, so you can road trip or go home early every weekend. You'll know which profs to take...and which to avoid like the plague. Just think, you'll have it made!

Until then, however, class scheduling can be tough, and sometimes unnerving. Like if you plan to take a required course second semester of your junior year, and then it's not offered. Or when you absolutely MUST get into a class (it's a prerequisite for everything else!) and you're closed out because it's full. Obviously, you'll need help. So here it is...

academic advising

All freshmen are assigned to professional advisors in Freshmen Advising or University College. As a sophomore, you will be assigned to a faculty advisor within the department. Faculty advisors are able to help you plan your course schedules and aid you in preparing for your career. You will have to go to them, however, because advising is something they take on in addition to their other responsibilities. They don't usually have the time to make personal calls seeking out each of their advisees. So, even if you don't need too much help with your schedule, make an appointment to talk with your advisor each semester - - he/she could be an excellent faculty reference for you later on...if you let 'em get to know you!

your DAPR

Okay, I know you're wondering...it's pronounced "dapper." It stands for Degree Audit Progress Report. This handy little printout is how the university keeps track of how close you are to finishing your degree. It's also an easy way for you to see how much you've accomplished and what exactly you still have to do in order to graduate. It shows all of your course requirements, GPA requirements, and credit hour requirements on one file, and it works like a checklist. Each time you complete a requirement, the computer places a plus sign next to it. If you haven't completed one yet, it will have a minus sign next to it. It's a good idea to keep an updated DAPR filed in with your course catalogue and this handbook. Sometimes DAPRs are mailed out to students, but I've always had to go pick mine up. You can get a copy of your DAPR (anytime after your freshman year) in the Academic Advising Resource Center for NR majors, in CP 253. Paul Gast is the center's coordinator. If there is ever a problem with your DAPR, see your advisor first...but you'll probably end up going to Paul and saying, "HELP ME!" Don't worry, he almost always will.

NR options

As a natural resources major, you will choose between five different options or areas of specialized study. All NR students complete a common core of courses in- and outside of the department. The rest of your major course requirements will depend on which of the five options you select. Each option was designed with particular goals in mind, but each allows some room for you to tailor your studies to your individual interests. The department also recommends certain minors depending on your educational and professional plans.

- **General Natural Resource Studies**

This option provides a general overview of resource and environmental issues. It is appropriate for students who do not want to specialize in one area of resource management, and for those who are unsure of their particular interests at first but who may want to specialize later. Students who want to become concervation enforcement officers should choose this option and minor in criminal justice/ criminology.

- **Resource Interpretation, Public Information, and Education**

The interpretation sequence within this option trains students to become a link between the general public and natural areas. Students who wish to study nature and share their knowledge on a firsthand basis as interpreters, naturalists, educators, or trail guides will enjoy this sequence. A biology minor is recommended.

The public information and education sequence within this option is appropriate for students who wish to participate in resource-related communication activities such as environmental journalismor PR. Recommended minors include journalism, public relations, and telecommunications.

- **Outdoor Recreation Management**

This option prepares students for entry-level positions managing outdoor recreation facilities such as reservoirs, parks, and ski resorts. Business foundations, aquatics, and physical education are appropriate minors.

- **Environmental Protection**

This options involves much more technical-oriented coursework than the previous three. Pollution control, public health, and waste management careers are the goals of many students in this option. This option is also the most appropriate preparation for graduate study in industrial hygiene. Chemistry is a common minor for students interested in environmental protection careers.

- **Land Resource Management**

This option is concerned with mine reclamation, land-use planning, landfill operation and design, and soil conservation management issues. It is also more technical in nature than the first three options are. Geology, geography, urban planning, and landscape architecture are appropriate minors.

developing a 4-year course plan

Everybody wants to graduate after four years of college...but some people don't. You can make sure you're not one of them, by planning ahead of time to fit all of your requirements in before your number is up. You need to have at least 126 credit hours to graduate. That sounds like a lot now, but later on you'll wonder where they all went. Don't waste time, credits, and money taking classes you really don't need (Underwater Paper Mache 101, for example) and then wonder why you have to attend summer school or an extra semester!

An easy way to ensure you complete all of your requirements on time is to develop a 4-year plan for course scheduling. It will help you organize your time better, it's less painful than an extra semester's tuition payment, and because it's not set in stone you can always change your plans in the future. There are three basic steps for planning out your eight semesters at Ball State. Read on for an explanation, and then turn to the next few pages to see examples. There is a step-by-step example planned out for each of the five options (along with one of its coordinating minors). Remember, however, that these plans are based on the requirements as of Fall 1993. Do not simply take the courses as outlined in the examples...that's not the point, and it will not guarantee that you graduate on time, because future requirements may be different. The IMPORTANT thing is to note how to prepare your own PERSONAL 4-year course plan, by following the same BASIC STEPS outlined here.

STEP 1: List all of your required courses, and then look up any prerequisite courses you must take first in order to get into them.

STEP 2: Note any prerequisite courses you need to take that you would not have had to take anyway (to fill some other requirement).

STEP 3: Use your lists of required courses and prerequisites, along with your general studies requirements (in your Course Catalog) to plan out your eight semesters.

general NR with business minor

STEP 1: List all courses (and their prerequisites) for major and minor. Watch for opportunities to choose courses that fulfill more than one requirement.

NR MAJOR:

CORE
- NR 101
- CHEM 111
- CS 104
- PSYSC 241

- NR 211
- NR 221
- NR331
- NR 341
- NR 405

(Complete Core First)

- NR 204
- NR 303 (ECON 201)
- BIO 216 (BIO 111 & 112)

+ 21 hours NR electives

+ choose 9 hours from a list of 7 courses

For example:
- NR 205
- NR 299X
- NR 304
- NR 306
- NR 346
- NR 347
- NR 369/496
- ECON 201
- GEOG 342
- POLS 347

BUSINESS FOUNDATIONS MINOR:

- ACC 201
- ACC 202 (201)
- BEOA 210 (math)
- BL 260
- ECON 201
- ECON 202 (201)
- MGS 221 (MATHS 132)

STEP 2: List courses that are prerequisites that are not also required courses. Check to see if these courses have any prerequisites!

- BIO 111
- BIO 112
- MATHS 132 (MATHS 131)

* MATHS 131 replaces MATHS 125 in general studies requirements.

example 1

STEP 3: Use lists, and general studies requirements to make a rough 4-year plan. Keep prerequisites in mind at all times!

	FALL		SPRING	
1	ENG 103	3	ENG 104	3
	MATHS 131	3	CHEM 111	4
	CS 104	3	PSYSC 241	3
	NR 101	3	MATHS 132	3
	GEOG 121	3	NR 211	3
	Total = 15		Total = 16	
2	BIO 111	4	BIO 112	4
	ACC 201	3	ACC 202	3
	BEOA 210	3	MGS 221	3
	NR 221	3	NR 205	3
	NR 204	3	SPCH 210	3
	Total = 16		Total = 16	
3	NR 331	3	BIO 216	4
	ECON 201	3	ECON 202	3
	BL 260	3	NR 341	3
	HIST 150	3	NR 303	3
	FINE ARTS 100	3	PHIL 100	3
	Total = 15		Total = 16	
	Take Writing Competency Exam		NR 369/496--Summer Internship	
4	MGS 300	3	FIN 350	3
	NR 299X	3	NR 405	3
	POLS 347	3	GEOG 342	3
	NR 304	3	NR 306	3
	NR 346	3	NR 347	3
	Total = 15		PEFWL ***	2
	Take GRE During Senior Year		Total = 17	

public info. / educ. & journ. minor

STEP 1: List all courses (and their prerequisites) for major and minor. Wise choices provide benefits- - use one course to fill a major and a general studies requirement!

NR MAJOR:

CORE
- NR 101
- CHEM 111
- CS 104
- PSYSC 241

- NR 211
- NR 221
- NR331
- NR 341
- NR 405

(Complete Core First)

- NR 395
- NR 491 (BIO 216)
- BIO 216 (BIO 111 & 112)
- JOURN 230
- ENG 231 (ENG 104)
- SPCH 375 (SPCH 210)

+ Info. and Education Sequence
- NR 369/496
- JOURN 210
- JOURN 211 (J 210)
- JOURN 261
- JOURN 385 (J 211)
- SPCH 320 (SPCH 210)
- TCOM 320 (Permission)

JOURNALISM MINOR:

- JOURN 101
- JOURN 125
- JOURN 210
- JOURN 211 (J210)
- JOURN 325
- JOURN 375 (J 211)

+ 6 hours JOURN electives:

FOR EXAMPLE:
- JOURN 230
- JOURN 261
- JOURN 385 (J 211)

In addition, notice how important certain choices are. For example, choosing JOURN 385 instead of TCOM 323 (or JOURN 230 as the photography requirement) for the major allows this student to also use those same 3-credit courses to fulfill his/her JOURN elective requirement in the minor.

STEP 2: List prerequisites that are not also required courses.

- BIO 111
- BIO 112

example 2

STEP 3: Use the lists and general studies requirements to plan out a rough 4-year schedule. Don't get caught up a creek without a paddle - - always keep prerequisites in mind!.

	FALL		SPRING	
1	ENG 103	3	ENG 104	3
	MATHS 125	3	CHEM 111	4
	CS 104	3	PSYSC 241	3
	NR 101	3	NR 211	3
	JOURN 101	3	JOURN 125	3
	Total = 15		Total = 16	
2	BIO 111	4	BIO 112	4
	JOURN 210	3	JOURN 211	3
	SPCH 210	3	ENG 231	3
	NR 221	3	NR 205	3
	JOURN 230	3	GEOG 121	3
	Total = 16		Total = 16	
3	NR 331	3	BIO 216	4
	ECON 201	3	TCOM 320	3
	JOURN 261	3	NR 341	3
	SOC 100	3	JOURN 250	3
	FINE ARTS 100	3	SPCH 375	3
	Total = 15		Total = 16	
	Take Writing Competency Exam		NR 369/496--summer internship	
4	JOURN 360	3	PHIL 100	3
	JOURN 375	3	NR 405	3
	JOURN 385	3	POLS 347	3
	SPCH 320	3	NR 395	3
	NR 477	3	NR 491	3
	Total = 15		PEFWL ***	2
	Take GRE During Senior Year		Total = 17	

outdoor rec. & aquatics admin. minor

STEP 1: List all required courses (along with their prerequisites) for the major and minor. Look for courses that fulfill more than one requirement, such as major elective and general studies credit.

NR MAJOR:

CORE
- NR 101
- CHEM 111
- CS 104
- PSYSC 241

- NR 211
- NR 221
- NR331
- NR 341
- NR 405

(Complete Core First)

- NR 369/496
- NR 371
- NR 473 (NR 371)
- NR 475 (NR 371)

+ 9-10 hours from resource emphasis:
- NR 353
- NR 477
- BIO 216 (BIO 111 & 112)

+ 6 hours from communications sequence:
- NR 491 (BIO 216)
- JOURN 261

+ 8-11 hours from site emphasis:
- ITEDU 152
- PEP 454
- NR 387

+ 3-6 hours from policy/admin. sequence:
- ACC 201
- MGS 261 (MGS 200)

AQUATICS ADMIN. MINOR:
- PEG 204
- PEG 205
- PEP 215
- PEP 315 (PEP 215)
- PEP 255 (PEP315)
- PEP 355
- JOURN 261
- MGS 200
- ACC 201

+ 5-6 hours from a list:
- PEG 206
- PEG 209
- PEP 295

STEP 2: List all prerequisites that are not also required courses. Be sure to find out if these courses have any prerequisites!

- PEP 299 (if you do not already have First Aid Certification)
- BIO 111
- BIO 112

example 3

STEP 3: Use your lists along with the general studies requirements in your Course Catalog to create a rough 4-year plan that will guide you in scheduling your courses each semester.

	FALL		SPRING	
1	ENG 103	3	ENG 104	3
	MATHS 125	3	CHEM 111	4
	CS 104	3	PSYSC 241	3
	NR 101	3	NR 211	3
	PEP 299	2	PEP 315	2
	PEP 215	1	PEG 209	1
	PEG 201	1		
	Total = 16		Total = 16	
2	BIO 111	4	BIO 112	4
	JOURN 261	3	MGS 200	3
	NR 221	3	HIST 150	3
	ACC 201	3	SPCH 210	3
	PEG 206	2	PEP 255	2
	PEG 204	1	PEG	1
	Total = 16		Total = 16	
3	NR 331	3	BIO 216	4
	MGS 261	3	GEOG 121	3
	NR 371	3	NR 341	3
	ITEDU 152	3	NR 473	3
	PEP 295	3	SOC 100	3
	PEFWL ***	2		
	Total = 15		Total = 16	
	Take Writing Competency Exam		NR 369/496--Summer Internship	
4	PHIL 100	3	FINE ARTS 100	3
	PEP 355	3	NR 405	3
	PEP 454	2	NR 205	3
	NR 387	3	NR 477	3
	NR 475	3	NR 491	3
	Total = 15			
	Take GRE During Senior Year		Total = 15	

env'l. protection & chemistry minor

STEP 1: List all required courses (and their prerequisites) for major and minor. Watch for opportunities to fill more than one requirement with the same class.

NR MAJOR:

CORE
- NR 101
- CHEM 111
- CS 104
- PSYSC 241

- NR 211
- NR 221
- NR331
- NR 341
- NR 405

(Complete Core First)

- CHEM 112 (CHEM 111)
- NR 315 (NR 211, CHEM 111)
- NR 346
- NR 347
- NR 381 (NR 211 & 221, GEOL 101, PHYCS 110)
- NR 385 (NR 211, CHEM 111)
- NR 387 (junior)

+18 hours from a list of courses

FOR EXAMPLE:
- NR 369/496
- CHEM 225 (112)
- CHEM 325 (225)
- HSC 482 (waived)
- PHYSC 110
- POLS 347

CHEMISTRY MINOR:

- CHEM 111
- CHEM 112 (111)
- CHEM 225 (112)
- CHEM 231 (112)

+ 7 hours CHEM electives

FOR EXAMPLE:
- CHEM 232 (231)
- CHEM 450 (232, MATHS 161)

STEP 2: List all prerequisites that are not also required courses. Don't forget to see if you meet the prerequisites of these courses!

- MATHS 161
- CHEM 232 (CHEM 231)
- GEOL 101

example 4

STEP 3: Use lists to create a sketched-out 4-year plan that will enable you to see how to fit all requirements in before graduation. Always keep general studies requirements in mind - - not just your major and minor!

	FALL		SPRING	
1	ENG 103	3	ENG 104	3
	MATHS 125	3	NR 211	3
	CS 104	3	PSYSC 241	3
	NR 101	3	GEOL 101	3
	CHEM 111	4	CHEM 112	4
	Total = 16		Total = 16	
2	BIO 111	4	ENG 231	3
	HIST 150	3	CHEM 231	3
	CHEM 225	3	NR 315	3
	MATHS 161	3	NR 221	3
	GEOG 121	3	SPCH 210	3
	Total = 16		Total = 16	
3	NR 331	3	BIO 112	4
	NR 346	3	NR 341	3
	CHEM 232	4	NR 347	3
	SOC 100	3	NR 381	3
	PEFWL ***	2	CHEM 325	3
	Total = 15		Total = 16	
	Take Writing Competency Exam		NR 369/496--Summer Internship	
4	HSC 482	3	CHEM 450	4
	NR 385	3	NR 405	3
	POLS 347	3	FINE ARTS 100	3
	NR 205	3	PHIL 100	3
	BIO 216	4	NR 387	3
	Total = 16		Total = 16	
	Take GRE During Senior Year			

land resource mgt. & geology minor

STEP 1: List all required courses (and their prerequisites) for the major and the minor. Pay attention to all of the choices you can make in your option that will let you use one course to fill two requirements!

NR MAJOR:

CORE
- NR 101
- CHEM 111
- CS 104
- PSYSC 241

- NR 211
- NR 221
- NR331
- NR 341
- NR 405

(Complete Core First)

NR 381 (NR 211 & 221, GEOL 101, PHYCS 110)
GEOL 101

+ 6 hours from a list:
- NR 324 (NR 221 & CHEM 111)
- NR 327 (NR 221 & CHEM 111)

+ 25 hours from a list of technical electives:
- GEOG 340
- GEOG 342
- GEOG 343 (342)
- GEOG 344 (240, 340, 341)
- GEOL 207
- GEOL 240
- GEOL 416
- GEOL 460
- NR 369/496

+ 3 hours from a list of courses:
- POLS 449

GEOLOGY MINOR:

- GEOL 101
- GEOL 102 (101)

+ 12 hours of electives:
- GEOL 207 (101)
- GEOL 240 (101)
- GEOL 416 (102)
- GEOL 460 (NR 211)

STEP 2: List all prerequisites that are not also required courses. Check to see if these courses also have prerequisites!

- GEOG 341 (GEOG 340)
- GEOG 240
- PHYCS 110

example 5

STEP 3: Use the lists and general studies requirement sin your Course Catalog to develop a rough 4-year plan that will guide you in scheduling your courses each semester.

	FALL		SPRING	
1	ENG 103	3	ENG 104	3
	MATHS 125	3	CHEM 111	4
	CS 104	3	HIST 150	3
	NR 101	3	MATHS 132	3
	SPCH 210	3	NR 211	3
		Total = 15		Total = 16
2	SOC 100	3	GEOL 102	3
	GEOL 101	3	GEOG 340	3
	GEOG 240	3	GEOG 342	3
	NR 221	3	NR 331	3
	NR 205	3	GEOG 121	3
	PEFWL ***	2	SPCH 210	3
		Total = 17		Total = 18
3	NR 324	3	GEOL 240	3
	GEOG 341	3	GEOG 344	3
	GEOG 343	3	NR 341	3
	GEOL 207	3	NR 337	3
	PHYCS 110	4	FINE ARTS 100	3
		Total = 16		Total = 15
	Take Writing Competency Exam		NR 369/496--Summer Internship	
4	GEOL 416	3	NR 205	3
	POLS 347	3	NR 387	3
	POLS 449	3	NR 405	3
	PHIL 100	3	GEOG 121	3
	NR 381	3	GEOL 460	3
		Total = 15		
	Take GRE During Senior Year			Total = 15

pitfalls to avoid

• **"I had to pay a late registration fee!"** Course registration for spring semester usually occurs around the beginning of November, and course registration for fall semester usually occurs around the first week of April. Watch for announcements in the *Daily News* and make sure you turn in your Course Request Forms on time!

• **"Sorry I missed that exam, Professor...I overslept."** If you're not a morning person, or if you plan to stay up late "studying" very often, don't sign up for 8 o'clock classes. It's that simple. Or, if you must take them, buy a REALLY loud alarm clock.

• **"I have four exams, three papers due, and a presentation to give this week!"** To avoid this predicament yourself, try to spread out what you expect to be your most time-consuming courses over several semesters on your 4-year plan, and then balance out each of them with easier general studies or lower-level courses.

• **"You didn't get into that course because you need a permission slip."** Certain courses, such as the TCOM courses required for the Resource Interpretation option, require you to get special permission to enroll. See the department's chair or the professor of the course for a permission slip to turn in with your registration form.

• **"Sorry, that course isn't being offered this year."** You should be aware that some courses are not offered every semester or even every year. Because demand for certain courses is low, they are only offered every other year. In most cases, the departments know well ahead of time when most courses will be offered. To prevent headaches, take your 4-year course plan to your faculty advisor, and ask if any courses you need to take may not be offered every year. He/she can then help you rearrange your eight semesters if it is necessary to accommodate a particular course offering. You might also pick up a current copy of the Course Registry from the Advising Resource Center in CP 253. It will show how many sections of each course will be offered each semester for the given year.

academic opportunities

- **Field Studies**

Every year the department sponsors trips to areas with particular resource management concerns. Students have visited Costa Rica, Eastern Europe, the Grand Canyon/Rocky Mountain area, southern Indiana, and the Boundary Waters Canoe Area along the Canadian border. Students can earn up to 3 hours of credit for participating in field studies, and certain trips also fulfill the global studies requirement in the general studies program. Spaces are limited on the trips, and financial aid is available.

- **Independent Study**

Students may wish to participate in individual research or special interest projects under faculty guidance. Sometimes it is possible to arrange to receive independent study credit through the department for such work. Speak to your faculty advisor, a professor you would like to work with, or the department chairperson about enrolling in NR 497 or 498.

- **Internships and Practicums**

Paid work experience in resource related positions may qualify for internship credit under NR 369. Similar unpaid experiences may qualify as practicums under NR 496. Oftentimes the department has contacts and leads to help you find an appropriate internship or practicum. Career services can also help. Once you beleive you have found a position, speak with the department chairperson or your faculty advisor about arranging to receive credit for your experience.

- **Courses Outside the Department**

Check course offerings every semester! Many departments offer NR-related courses. One example is a section of ENG 390 called "Meadow, Mountain, Sand, and Sea: The Language of Nature - - Poet/Prose Naturalists."

Things to do...

People to see,

Since you've been at Ball State, you've heard the phrase "Get a life!" a million times. (Or at least it seems like it!) But how do you go about getting a life? Well, for starters, try participating in one or more extra-curricular activities.

Student organizations not only provide you with a way to spend your free time--other than watching mildew grow on your towels, that is--but they also give you opportunities to meet people with similar interests (in plain English that means friends and "date" material!). Making contacts with students in your department can also be very practical--especially if you need help in a class and you meet someone who got an "A" in it the previous semester!

Here are some students groups and activities that might be of interest to you as an NR major. Choose one that sounds like fun and sign up today! To find out more about these and the many other activities Ball State has to offer, call the Office of Student Activities at 285-5037.

Natural Resources Club

The NR Club promotes public understanding of resource management issues and has been responsible for many "green" special events at BSU, such as the Christmas tree decorating contest, Christmas tree "recycling" program, and the Earth Day festival. Contact Betty Guemple in the NR Department at 285-5789.

S.E.E.C.

Students for Ecological and Environmental Careers assists students interested in careers related to ecology, natural resource management, and environmental sciences with skill development and career preparation. First- and second-year students are needed to assume leadership positions in this newly-formed club. Contact Dr. David LeBlanc in the Biology Department or send VAXmail to username ØØDCLEBLANC.

Groundwork

Groundwork is an environmental publication funded by the "Green for Green" campaign. Contact Mark Hamilton in the English Department for more information.

Saturation Point Project

This group concerns consequential environmental issues and enables students to affect a positive change in the environment. Contact Leo Hodlofski in Foriegn Language.

Daily News

As Ball State's award-winning student-run newspaper, the Daily News provides an opportunity for students to write columns, articles, and letters to the editor about a variety of issues both local and national, including the environment. Contact David Knott in West Quad.

Outdoor Recreation

Call the Office of Student Activities at 285-5037 for information about joining the following groups:

Cardinal Cycling Team	Ski Club
Equestrian Team	Triathlon Club
In-Line Skating Club	Water Ski Team
Sailing Club	Frisbee Club (Wizardz)
Scuba Club	Women's Frisbee Club

Student Government Association

Every Ball State student is an integral part of the Student Government Association and is encouraged to participate and get involved with SGA activities. Student Senate considers legislation concerning the campus community. You could represent fellow students as a senator in one of five legislative caucuses: At-Large, Graduate, Off-Campus, Freshmen, or On-Campus. There is also an Environmental Affairs Department within the Executive Branch of SGA whose director is appointed by the SGA executive officers. For more information, call 285-8631 or stop by room 223 in the Student Center.

Things to know, Places to go...

As you can see, college life has a lot more than dorm food to offer you. You just have to know what's available and then take advantage of it. The problem is, most students don't find out what's available until it's too late to take advantage of it! This section will give you a headstart.

From reading the Daily News to getting comfortable in the computer labs, there are many things you can do right now that will make a big difference in what you get out of your stay at Ball State. Remember--you're either in college to broaden your mind or to prepae for a career (be honest with yourself, you could stay home and save a lot of money if you just want to party!). The advice here will help you do both. Flip through the next couple of pages now, and come back to them at least once a semester. If you do even a few of the things recommended, you will most likely perform better in your classes, have a more impressive resume when you graduate, and have fewer stress-related illnesses!

4-year plan for success

Biology Professor David LeBlanc is a faculty advisor for Ball State's Students for Ecological and Environmental Careers. He suggests planning your college experience to better prepare yourself for a successful career. He devised the schedule on the facing page, and gave the hints listed below. Whether or not you follow these suggestions is up to you. But if you choose not to follow them... well, let's just say you'll live to regret it!

additional hints

- Some people say grades don't matter, BUT...Employers and grad schools WILL look at your GPA, particularly in your major, for evidence that you are a good learner. Remember, anything lower than a "B" average will not look attractive.

- Faculty references are also very important, but professors will have to know you WELL to recommend you for anything. Get to know faculty and work with them if possible. Earn their respect, and prove you are worthy of these praises: he/she is a hard worker, a quick learner, shows initiative, and can work independently.

- Take the GRE during your last year at Ball State. You WILL eventually need a graduate degree to move up in your field, and you will never be as prepared to take the exam again. Also, schools will accept your scores for up to five years after you take the exam.

your personal growth chart

It would be a good idea to refer back to this chart at the start of each semester, and every time you schedule your courses. Since this booklet is yours to keep, you might want to mark on the chart to keep track of what you have accomplished so far. In addition to using this chart as a guide, consult your academic advisor and any faculty in your field. They may know of specific opportunities for research experience, which professional organizations you might want to join, or how to organize your major courses to help prepare for career-related summer employment.

YEAR	COURSES	SKILLS	EXPERIENCE
1	Writing Math Chemistry Major Prerequisites	Computers: Keyboarding Wordprocessing	Department: Office Clerical Assist Faculty
2	Major skills: Taxonomy Chemistry Writing	Computers: Wordprocessing Graphics	Volunteer Research SCA summer intern. Memberships: Professional Environmental
3	GRE Prep. Skill Courses: Statistics Taxonomy G.I.S. Public Spkg.	Computers: Spreadsheet Database Graphics	Research Asst. Summer Job: Park Service DOE Lab IDNR Practicum (unpaid)
4	Major Courses Skill Courses: Remote Sensing Public Spkg. Tech. Writing	Job Search: Write Resume Cover Letter ID Employers Make Contacts Follow-Ups Interviewing	Independent Study Internship Undergraduate Fellowship

Reading is Fundamental

Reading IS fundamental. Or, as faculty member Paul Chandler has said:

"Students seeking to 'save the Earth/planet/rainforest/etc.' often believe that their degree of caring is more important than their level of knowledge. Unfortunately...their subsequent careers will create unnecessary hardships for other people and more often than not will result in little or no worthwhile improvement in the status of natural resources or the environment."

What he did not mention, however, is that as your level of knowledge increases, your degree of caring probably will, too. So when you would rather do anything than study for that big test, pick up a book, newspaper, magazine. Trust me, it's a better excuse than "I couldn't study because I had a tanning salon appointment." This list of important environmental readings was condensed from suggestions made by faculty and students who have been here so long that the custodians know them by name. It should give you enough to go on for your entire Ball State career...

periodicals and articles

Buzzworm (magazine)
Newsweek (magazine)
Time (magazine)
The New York Times (newspaper)

"Lifeboat Ethics: The Case Against Helping the Poor" *Psychology Today* 8 (4)
"Green Cassandras: Has Environmentalism Blown It?" *The New Republic* 207 (3)

books

A Sand County Almanac by Aldo Leopold

Silent Spring by Rachel Carson

State of the World by Lester Brown

The Population Bomb by Paul Erlich

Walden by Henry David Thoreau

Wilderness and the American Mind by Rod Nash

Small is Beautiful: Economics as if People Mattered by E.F. Schumacher

Desert Solitaire by Edward Abbey

The Closing Circle: Nature, Man, and Technology by Barry Commoner

Man and Nature by George Perkins Marsh

The Doomsday Syndrome by John Maddox

Free Market Environmentalism by Terry Anderson and Donald Leal

Apocalypse Not: Science, Economics, and Environmentalism
by Ben Bolch and Harold Lyopns

Eco-Scam: The False Prophets of Ecological Apocalypse by Ronald Bailey

Earth in the Balance by Al Gore

Soft Energy Paths by Amory Lovins

Deep Ecology by William Devall and George Sessions

Energy Basis for Man and Nature by H.T. and Elizabeth Odum

The Resourceful Earth by Julian Simon and Herman Kahn

Environmental Ethics by K.S. Shrader-Frechette

Earth Education by Steve Van Matre

Environmental Design Primer by Tom Bender

Water and Choice in the Colorado Basin by Gilbert White

a computer is a student's best friend

Learning to use computers is probably the single most important thing you can do to help yourself out right now. If you know how already, that's excellent. If you don't, get with the program (no pun intended!). And if you don't know how to type, LEARN!!! Then familiarize yourself with the locations of labs on campus, at least one type of system (IBM/compatible, Macintosh, VAX, etc.), and each of the following types of application software: wordprocessing, spreadsheet, database, graphics, and desktop publishing. The hours of frustration you will avoid are infinite.

In addition, your grades will most likely be higher, reflecting the amount of professionalism your work shows. Think about it. Which looks better, a hand-scribbled lab report with a hand-drawn graph in marker stapled to it, or a laser-printed text with a spreadsheet-generated graph integrated into the body (between paragraphs)? You know the answer. Using a computer doesn't make your answers any more correct, but it shows that you have put effort into the project, and that you respect the person to whom you are submitting it (you wouldn't want to grade all of those five-page, messy, hand-written papers, would you?).

Employers look for people with computer skills, as well. Even if you want to be a lab technician, you will probably use a computer to record test results. You will also need to submit those results to your boss, and I doubt you will ask, "Does this have to be typed?" Classwork done on a computer looks good when you show it to an employer at an interview, too. It can mean you get the job instead of someone with the same educational background who lacks computer skills. In a tough job market, any little advantage you create for yourself is important.

So take advantage of Ball State's "campus of the future." You'll find we have more computers for student use than most other universities, including I.U. and Purdue. This booklet provides a computer lab directory and some general guidelines to help you get started using computers on campus. Good Luck!

UCS

University Computing Services operates 18 public computer labs with a total of nearly 500 individual workstations across campus. The labs are managed and staffed by students with UCS guidance. The lab assistants are not computer instructors, but they can answer many questions about software and equipment. UCS labs also provide manuals, handouts, and other information for software, programming languages, equiptment, and so on. Stop by a lab near you and pick up the "User's Guide to University Computing Labs," a booklet produced nearly every year that contains the most up-to-date information about what's available, including specific lab hours and lists of available equipment and software.

Students have access to IBM and compatible personal computers, Macintosh and Apple microcomputers, and a mainframe system known as VAX. To use VAX, you'll need to stop by the UCS information desk in RB 165 and pick up your username, password, and rules for using the system. Bring a valid student ID or driver's license. Many professors and student organizations communicate on VAX by using electronic mail. You will receive instructions for using e-mail with your username and password.

To use IBM-PCs or Macintosh computers, you simply go to a lab, and check in with the assistant on duty. You will need to show your student ID, and you may be asked "What class is it for?" You should tell them the name of the department (NR, SPCH, ENG, etc.), or that it is not for a class, whichever is appropriate. (They are merely keeping track of lab usage by college, such as how many students from Science & Humanities use each lab.) Bring your own disks to save your work on, because the hard drives get too crowded and anything extra will be dumped from the memory. Most labs have 3.5" disk drives, but some IBM-PC labs also have 5.25" drives. The lab assistants can usually show you how to get started and can answer most questions. Just ask (politely, of course!) if you aren't sure what to do!

lab directory

LAB LOCATION	TYPES OF COMPUTERS AVAILABLE
General Labs	
BB 220	13 IBM-compatibles; 1 Mac; 2 VAX terminals
BL 08	8 IBM-compatibles; 15 Macs; 16 or 17 VAX terminals
CN 313	15 IBM-compatibles; 1 VAX terminal; 1 Zenith 386
HP 101	3 Macs; 19 Zenith 286
LU 121	12 Compaq 486
NQ 323	2 IBMs; 20 Macs; 8 VAX terminals
PA 208	25 IBM-compatibles
RB 134 (24-hour lab)	Main lab: 58 VAX terminals; 2 DECwriters 134 B: adaptive computer technology 134 C: 24 Zenith 386 134 D: 21 VAX terminals (for classes) 134 F: 16 Macs
RB 283	24 Zenith 286
TC 709	1 IBM; 16 Macs; 17 Apple IIGS; 1 VAX terminal
WB 202	45 IBM-compatibles
WB 206	20 IBM-compatibles; 10 Macs
WB 212	47 IBMs
WB 216	9 Macs; 35 Zenith 386
Graphics Labs	
AB 021	17 Intergraph workstations; 17 Macs; 11 Tangent 486; 2 VAX terminals
AC 314	15 Macs; 10 Quadra 950
CL 469	3 IBM-compatibles; 10 SUN workstations

the libraries

Ball State has several libraries on campus. Of course, the big brick one off McKinley Avenue is Bracken, the main library. It's got a computer lab, some cool toys, and a 24-hour study lounge complete with vending machines. It's also THE place to do most research and group projects. (Most groups meet at the "naked lady" statue in the lobby by the spiral staircase, by the way.)

All jokes aside, Bracken does have a lot to offer, and it's easy to take advantage of the huge selection because Bracken has a computerized database and catalog system (instead of a card catalog) called ANSWER. When you walk in, you can't miss the terminals, they're all over the place. There are even brochures at each station and several explanatory help screens to teach you how to use the ANSWER system. OPAC lists books, videos, pictures, audio cassettes and CDs, and realia (items you can check out, such as toys and musical instruments). EXAC lists popular periodicals such as the *New York Times* and *Time* magazine. NAVS contains newspaper abstracts, BUSI lists only business periodicals, ERIC 1 and 2 list educational papers, and COMP is a company directory.

Bracken contains several particularly interesting collections, such as Educational Resources (in the basement), the Map Collection, and Government Publications (both on the second floor). The maps and the government documents are excellent for researching resource issues, while Ed. Resources is a good place to find audio-visual materials and equipment, children's books, and lesson plans.

The Architecture Library in the College of Architecture and Planning has a slide collection and many other materials related to site analysis, design, construction, and reclamation. The Science-Health Science Library in the basement of Cooper Science contains many scientific journals and reserve materials for various GEOG, GEOL, BIO, and CHEM courses. Familiarize yourself with all of the libraries ASAP!

Jobs to find...

Decisions to make,

If you're like many college students, you plan to find a job and start your career after graduation (possibly to pay off student loans?). Perhaps you already had specific career goals in mind when you chose your major. Perhaps you even stuck with them. But then again, maybe not...Maybe you aren't sure exactly what you want to do within the broader field of natural resources and environmental management. Maybe you think you know, but you need more information to be sure. Maybe you do know where you're going, but you aren't sure how you're going to get there.

Whatever situation you're in, planning your career will entail making a lot of decisions! The best way to make any decision is to be knowledgeable about all of the options available to you. That means being informed about the types of positions you're qualified forand about your personal preferences--geographic, type and size of of employer, and pay requirements. These next few pages should help.

Career Guidance

The following books are available at Bracken Library and/or the office of Career Services (Lucina Hall):

Becoming an Environmental Professional. (1990)

Career Information Center (4th ed.): *Agribusiness, Environment and Natural Resources.* (1990)

Careers in Natural Resources and Environmental Law, by Percy Luney. (1987)

Careers in Science, by Thomas Easton. (1990)

Careers for Nature Lovers & Other Outdoor Types, by Louise Miller. (1992)

The Complete Guide to Environmental Careers, from the CEIP Fund. (1989)

Conservation Directory, from the National Wildlife Federation. (1987)

Federal Jobs for College Graduates, by D. Morgan and R. Goldenkoff. (1991)

Opportunities in Environmental Careers, by Odom Fanning. (1991)

The Outdoor Careers Guide, by Gene R. Hawes. (1986)

Peterson's Job Opportunities for Science, Engineering, and Computer Graduates. (1990, 1991)

Job Vacancy Newsletters

These newsletters list job openings around the country in environmental fields.

Career Services:

Earth Works

Environmental Careers Bulletin

Federal Jobs Digest

NR Department Office, WQ 110:

The Job Seeker

Environmental Opportunities

Earth Work

where are they now?

Department Chair John Pichtel says the department takes particular pride in the positions held by its graduates. He says this field has always been very competitive, with graduates from agricultural schools like Purdue filling the most of the vacancies with resource management agencies in Indiana. In spite of this historical disadvantage, Ball State graduates are now competing quite favorably against others for government and private sector jobs. According to Dr. Pichtel, one former Director of the state DNR has said Ball State's "program is graduating many very good people."

Ball State graduates have held positions with several state environmental agencies, including IDNR, IDEM, the State Emergency Management Agency, and the State Board of Health. They have also been employed by the federal government with such agencies as the U.S. Navy and Air Force, various U.S. Geological Survey districts, and the Fish & Wildlife, Forest, Soil Conservation, and National Park Services. Of course, alumni are also employed in the private sector in a variety of fields and positions.

I requested a list of positions held by Ball State NR graduates to give you an idea of the type of careers that are out there and of just how much variety exists within the broad field of natural resource and environmental management. Perhaps while looking over the list you will find a job title that sounds interesting. Use that title to find more career-related information as described on the previous pages. Or, consult a professor whose interests lie in the area of the particular job you are interested in. He or she will probably be able to give you a little more personal insight than a book and then direct you to particular sources for more information. Remember, professors get PAID to be information resources for you. Take advantage of what you (or your parents) are paying for!

state agencies

Arizona Department of Water Resources
- Unit Supervisor

Colorado Division of Wildlife
- State Hatchery Supervisor

Indiana Department of Environmental Management
- Environmental Scientist
- Senior Project Manager

Indiana Department of Natural Resources
- Assistant Manager, Fish & Wildlife Div.
- Conservation Officer
- Deputy director, Div. of Reclamation
- Engineering Assistant, Div. of Water
- Environmental Speciualist/Ecologist
- Erosion Control Technician, Div. of Soils
- Head, Lake Permits Section
- Lake Inspector, Div. of Water
- Naturalist
- Realty Supervisor
- Reclamation Specialist
- State Parks Property Manager
- Streams and Trails Coordinator
- Wetlands Clerk

Indiana State Board of Health
- Director of Flouridation

Indiana State Emergency Management Agency
- Director

Louisiana Department of Health
- Regional Supervisor

North Carolina Wildlife Commission
- Assistant Fisheries Biologist

State of Montana
- Game Warden

federal agencies

National Park Service
- Executive Assistant
- Outdoor Recreation Planner

Soil Conservation Service
- District Conservation Officer
- State Resource Conservation Officer (Virginia)

U.S. Air Force
- Curriculum Development Manager

U.S. Forest Service
- Forester

U.S. Fish & Wildlife Service
- Industrial Hygienist

U.S. Geological Survey
- Hydrologic Technician

U.S. Navy
- Environmental Protection Assistant

local agencies

- Berrien County Parks--Property Manager
- Brevard County (Fl.) Traffic Management--Assistant Director
- City of Dowagiac, Michigan--Grounds Director
- Fauquier County (Wa.) Parks & Recreation--Assistant Parks Manager
- Indianapolis Air Pollution Monitoring--Environmental Specialist
- Marion County Health Department--Environmental Health Bureau Chief
- Lapel Wastewater Treatment Plant--Operator
- Los Angeles County Sanitation District--Lab Technician
- St. Joseph County Parks--Program Director
- Washington County Sewage Treatment Program--Code Enforcement Officer
- West Florida Regional Planning Commission--Planner

private companies

- Amoco Corporation--Industrial Hygienist
- Arawak Consulting Corporation--Training Consultant
- BCM Eastern--Scientist
- Callaway Gardens--Interpretive Naturalist
- Cole Hardwood, Inc.--Sales
- Dawes Arboretum--Researcher
- Dow Brands--Communications
- Florida Power & Light--Nuclear Plant Operator
- Indiana Michigan Power--Industrial Hygienist
- Kleinfelder & Associates--Geotechnical Engineer
- Leisure Lawn, Inc.--Manager
- Nippondenso Manufacturing--Industrial Wastewater Operator
- Sigurd Olson Environmental Institute--Program Director
- Soils Engineering Services--Senior Designer

Career Services

One complaint you'll hear from older students about Career Services is that they only help business and education majors. That isn't true, however. Business and education majors do have MORE opportunities available through the Career Services office, but there is a simple explanation for this. Large companies and school systems hire people in bulk. It is economically feasible for a huge accounting firm to go to a college and interview 200 business majors at once, because they may be hiring 20 new accountants at a time. When a government agency or a consulting firm has one position open for an environmental scientist, however, it doesn't make much sense to spend all of that money doing mass on-campus interviews! So we don't have opportunities to interview for several huge companies all on one day in the Student Center Ballroom. But that doesn't mean Career Services can't help us at all! So don't ignore this valuable resource simply because others tell you it's not worth your time. Give the Career Services staff a chance to do THEIR job!

Career Services offers a lot of programs to help prepare you for your job search--whether you're looking for your first job after college, or just an internship for the summer. They offer workshops on resume writing, portfolio building, and interview techniques, just to name a few. They also have a candidate referral system, which can put employers in touch with YOU. You simply fill out an application and turn it in to the Career Services office, and then when employers request candidates with your qualifications, Career Services sends them a list of names, including yours! They also offer videotaped practice interviews. You supply your resume and a description of the type of job you'll be interviewing for, then show up dressed and prepared as if it were a real interview. A staff member will interview you, and then review the tape with you, suggesting ways you mght improve. By the way, Career Services is located on the second floor of Lucina Hall, right next to West Quad, so you can't say you couldn't find it!

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Information concerning student organizations was compiled from the *1993 Cardinal Pride Guide*, produced by the Ball State Student Government Association, and the *Ball State University 1993-94 Calendar of Events*, produced by the Student Center. Information regarding University Computing Services was obtained from their 1993 publication titled *Computer Encounters.* All other information was acquired by me personally, during four and a half years as an undergraduate student at Ball State University, all but one spent as an NR major.

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